

PERCEPTION AND ATTITUDE OF ADOLESCENTS REGARDING ADOLESCENCE RELATED HEALTH ISSUES

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ABSTRACT

Objectives: To assess the level of awareness of adolescents, role of parents, teachers and friends, and to compare level of health awareness of boys with girls, and also government institution students with private institution students regarding adolescent health.

Material and Methods: The cross sectional study was conducted by the Department of Community Medicine Khyber Medical College, in Peshawar District; from January 2016 to June 2016. After taking approval, a total of 429 students both male and female, of ages 11-19 years were selected by non probability convenience sampling. A structured questionnaire was designed to collect data regarding important dependent and independent variables. A total of eight educational institutions were conveniently selected in which half were from public and half were from private sector. Results were analyzed using SPSS Version 16.0 and presented in form of tables.

Results: Our study revealed that 51.98% had moderate and 47.09% had good level of awareness regarding adolescent health; and only 0.93% had an excellent level. Female adolescent students (51.98%) were better aware than male students (42.28%); and the difference was significant at $p < 0.05$. Public sectors scored significantly higher (53.34%) than the private sector (46.29%) at $p < 0.05$. Role of family and institution was poor to moderate and were 76.92% and 68.99% respectively; regarding adolescent health.

Conclusion: It was concluded that majority of the adolescents had moderate level of awareness regarding adolescent health and girls scored higher than boys. Moreover, the government schools played better role than private schools and the role of friends was much better than parents and teachers. It is recommended that families and schools adopt a more active role in raising awareness of adolescents.

Key Words: Adolescent Health, Public & Private Sector, Parents, Teachers, Peshawar.

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INTRODUCTION

Adolescence is that time in the life span of an individual which poses the body to so many challenges and opportunities. The period of adolescence is full of choices and thus adolescents till their entry into the adulthood, develop healthy life practices and attitudes concerning their health. During the period from adolescence till adulthood, they select their own future choices

and thus contribute actively in the various activities of life being^{1,2,3,4}.

Adolescence is considered one of the transition stages of development. Adolescents and young adults are mainly sensitive to behavioral and environmental factors as the need of life and society. Environmental factors including family, peer groups, community, schools, neighborhood, policies, media exposure and societal factors affect a lot adolescent's health and social behavior and thus contribute to the wellbeing of the society⁵. Adolescence is a stage of biological, physical and psychological development that starts from puberty till adulthood^{6,7}. Adolescent health development includes biological development, cognitive development, psychological development and social development⁸.

Generally, few young people achieve sound health and rich development during their early adoles-

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cent life but many young people indulge in unethical and harsh social adversities and thus engage in unhealthy behaviors which affect their life and safety^{9,10}. In some circumstances serious chronic disease, illiteracy, poor health, lack of economic facilities, loss of opportunities and many more problems increase the financial burden of the society¹¹. The problems to which adolescents are prone are injuries, violence, depression, anxiety, suicidal inclination, drug abuse, STD's, and abnormal behaviors etc^{12,13}. In a study adolescents could define puberty, menstruation, and conception; and approximately 58% of them had some knowledge about menstruation before it occurred. The majority of adolescents mentioned some social taboos during menstruation and only 32.5% of adolescents had heard of reproductive tract infections. More than three quarters (76.5%) had heard of sexually transmitted diseases (STDs), particularly HIV/AIDS¹⁴.

Pakistan currently has the largest cohort of young people and subsequent cohorts are projected to be even larger¹⁵. Increasing the awareness of the young cohorts about their health and wellbeing is important. National Programs are needed to address adolescents and youth in a holistic and multidisciplinary way to highlight the importance of such initiative. There is a large difference in the current situation of adolescents and youth, males versus females, from different levels of economic status and environmental background. In Nepal, a study was conducted on unmarried (76.50%), literate (79%) adolescents of various ethnic groups; and approximately half (56%) of the adolescents were students¹⁶.

Keeping the above situation in mind, it is important for the adolescents to be aware of the changes that occur in their body at puberty¹⁷. Pakistan's population is currently growing at a rate of approximately 2% and thus has large cohort of adolescents and is expected to increase in the near future. The purpose of assessing the level of awareness of the young individuals about their adolescence related health issues was to find the areas where they were deficient; to communicate findings to the higher concerned departments so that proper measures could be taken that would adequately and effectively raise their awareness about adolescent health to a level that is both required and expected¹⁸.

MATERIAL AND METHODS

This cross sectional study was conducted by the Department of Community Medicine Khyber Medical College, in Peshawar District; from January 2016 to June 2016. After taking approval from the ethical review committee, a total of 429 students both male and female students of ages 11-19 years were selected by

non probability convenience sampling. A total of eight educational institutions were conveniently selected in which half were from public and half were from private sector. A structured questionnaire was designed, consisting of 45 questions and 8 variables. To collect data regarding important dependent and independent variables i.e. personal information, role of family, role of educational institutions, role of peers, level of awareness about physical health, level of awareness about reproductive health, level of awareness about proper social attitude, level of awareness about psychological health and source of information. The questions were sufficiently well defined and close ended. The questions were broadly of two type. One with binary answer while the other with Likert type scale. The answer which indicated the worst level of health awareness was given 0 marks while the answer which gave the best level of health awareness was given maximum marks. Maximum marks were 1-7 depending on the number of options each question had. Using this technique we got 168 points for the female adolescents' questionnaire and 166 for the male adolescents' questionnaire. Those who got 25% of the total were labeled as poorly aware, 25%-50% were moderately aware; 50% - 75% were good whereas 75% - 100% were labeled as having excellent awareness. Results were analyzed using SPSS version 16 and presented in form of Tables.

RESULTS

Our study results found that regarding overall health awareness, 51.98% (n=223) adolescents had moderate, 47.09% (n=202) had good, 0.93% (n=4) had excellent while none had poor awareness. Regarding physical health awareness, it was found that, 51.98% (n=223) adolescents had good, 41.96% (n=180) had moderate, 2.1% (n=9) had excellent while the percentage of adolescents with poor awareness about physical health is 3.96% (n=17); whereas regarding sexual health, 47.09% (n=202) had good, 31.93% (n=137) had moderate, 11.89% (n=51) had poor while 9.09% (n=39) had excellent awareness about sexual health. Regarding social attitude, 23.08% (n=99) had moderate, 17.95% (n=77) had good, while 33.10% (n=142) had excellent awareness; whereas regarding psychological health, 14.92% (n=64) had poor, 34.97% (n=150) had moderate, 33.10% (n=142) had good while 17.02% (n=73) had excellent awareness about psychological health. Approximately 34.97% (n=150) adolescents were poorly, 44.06% (n=189) moderately, 17.95% (n=77) good, and only 3.03% (n=13) were excellently guidance by their families.

Regarding friends guidance; 41.03% (n=176) were guided excellently, 17.95% (n=77) good, 21.91% (n=94) moderately, and 20.05% (n=86) poorly guided.

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Table 1: Relationship Between Government and Private Institutions Adolescents (N=429) And Selected Variables Regarding Adolescent Related Health issues in Peshawar

Variables	Response	Government	Private	Total	X2 Test*
Overall Health Awareness	Good-Excellent	56	137	193	3.91
	Poor-Moderate	49	187	236	
Physical Health Awareness	Good-Excellent	66	176	242	2.34
	Poor-Moderate	39	148	187	
Sexual Health Awareness	Good-Excellent	73	180	253	6.39
	Poor-Moderate	32	144	176	
Social Attitude Awareness	Good-Excellent	67	152	219	9.05
	Poor-Moderate	38	172	210	
Psychological Health Awareness	Good-Excellent	32	183	215	21.45
	Poor-Moderate	73	141	214	
Role Of Family In Adolescent Awareness	Good-Excellent	17	43	60	0.56
	Poor-Moderate	88	281	369	
Role of Institute In Adolescent Awareness	Good-Excellent	75	90	165	21.45
	Poor-Moderate	30	234	264	
Role of Friends In Adolescent Awareness	Good-Excellent	65	181	246	1.18
	Poor-Moderate	40	143	183	

* Chi Square Test at P = 0.05

Table 2: Relationship Between Boys and Girls of Adolescence age (N=429) and Selected Variables Regarding Adolescent Related Health issues in Peshawar

Variables	Response	Boys	Girls	Total	X2 Test*
Overall Health Awareness	Good-Excellent	82	124	206	4.30
	Poor-Moderate	111	112	223	
Physical Health Awareness	Good-Excellent	109	133	242	0.0006
	Poor-Moderate	84	103	187	
Sexual Health Awareness	Good-Excellent	98	155	253	9.74
	Poor-Moderate	95	81	176	
Social Attitude Awareness	Good-Excellent	76	143	219	19.12
	Poor-Moderate	117	93	210	
Psychological Health Awareness	Good-Excellent	116	99	215	13.99
	Poor-Moderate	77	137	214	
Role Of Family In Adolescent Awareness	Good-Excellent	36	56	92	13.99
	Poor-Moderate	157	180	337	
Role of Institute In Adolescent Awareness	Good-Excellent	49	84	133	5.16
	Poor-Moderate	144	152	296	
Role of Friends In Adolescent Awareness	Good-Excellent	126	120	246	9.04
	Poor-Moderate	67	116	183	

* Chi Square Test at P = 0.05

The relationship between adolescents of government and private institutions and selected variables regarding adolescent related health issues is given in Table 1. The relationship between boys and girls of adolescent ages and selected variables regarding adolescent related health issues is given in Table 2.

DISCUSSION

This study was conducted to assess high school children's perception and awareness about adolescent health and the role of peers and institutions in creating this awareness. In this study it was found that almost half of the adolescents (52%) had moderate awareness, 47% had good while only 1% had excellent awareness. Bilqees Rehman conducted a study in Peshawar and found out that 43% of the interviewees had excellent understanding about adolescent health while 45% had only moderate¹⁹.

In our study, in 31% of the cases the educational institutes played a good to moderate role in educating adolescent students. Two nationwide surveys were conducted in U.S which showed that most teachers would like to teach comprehensive and other controversial issues inside the classroom but they are unable to do because either they are not permitted by the school policy or because they were afraid of community re-primation²⁰. In comparing public with private sector institutions, it was found that public sector institutions were better aware (53.34%) than the private sector institutions (46.29%) and that might be contributed to more focus of private sector institutions on academics rather than on co-curricular activities. A positive school experience is considered a resource for health and well-being, while a negative experience may constitute a risk factor, affecting students' mental and physical health. "Liking school" has consequently been identified as a protective factor against health-compromising behaviors including bullying, sexual risk-taking, tobacco, alcohol and drug use. Students who dislike school or do not feel connected to it are more likely to fail academically, drop out and have mental health problems. In an HBSC survey 2009-10; young people were asked how they feel about school at present. Fewer students reported liking school a lot at age 15 than age 11. This change was significant in most countries and relatively large, with differences of over 15% reported. Girls were more likely to report "Liking it a lot" at all three ages. The gender difference was significant in almost all countries and regions at age 11, but in only around half at age 15. Differences were moderate, in generally around 5-10%²¹.

In our study, a comparison was also done between the perception of boys and girls regarding

adolescent and sexual health issues. It was found that higher percentage of girls had good to excellent level of awareness (52.54%) than boys (42.48%). This is probably because the girls get mature at an early age as compared to boys of the same age and also develop a more serious attitude towards life and sexual health. An analysis conducted by Hayat life line showed that awareness rate among girls about their sexual and reproductive health was 23.4%, slightly lower than boys i.e. 27.1 %²². This is in slight contradiction to our study probably because there were more female participants in this study as compared to male i.e. 236:193 so the probability of getting more females increases. Moreover, in these female institutions the teachers were also female so this reduces the communication barrier between the students and the teacher in this type of sensitive issue. On the other hand, boy's schools also had many female teachers so this created a communication barrier to discuss sensitive issues related to reproduction. In another study young people who had reached puberty were asked whether they had been informed about the event beforehand. More males than females reported such knowledge in both age groups, while a slightly higher proportion of females in the younger group had been informed, compared to the older group (33 percent versus 29 percent). Surprisingly, those currently residing in the rural areas and from poorer households were more likely to have been informed than those in the urban areas, with the difference being greatest among females. Asked whether they thought they should be informed in advance, three-quarters of females and two-thirds of males answered in the affirmative, suggesting a particularly significant gap between females who are informed and those who wish they were informed²³.

An analysis was also done in this study to find out the role of parents in informing their adolescent children about adolescent related health changes. In our study, it was found that the role of parents were not very encouraging and the reason might be that the parents in our culture did not find it reasonable to discuss such issues with their children because of the social norms and traditions. Moreover the children are also distanced from their parents in most of the cases and are not so frank to discuss these matters. In a study, conducted in 8 districts of Pakistan including Karachi, Lahore, Peshawar, Quetta, Abbottabad, Jamshoro, Lodhran and Pishin revealed that most parents and teachers are reluctant to discuss this sensitive issue with their children, which pushes them to seek this information from unreliable sources that can lead to their exploitation²². According to HSBC study, in European countries, United states, Canada and Russian federa-

tion; in 13 year olds, approximately 82% females and 84% males while in 15 years old, approximately 77% females and 78% males found it easy to talk to their mothers; 56% females and 76% males found it easy to talk to their fathers. Approximately, 65% females and 50% males had daily electronic media contact with their friends. On average 30% females and 23% males were satisfied with their school environment, and 66% females and 65% males agreed that their friends were kind and helpful²⁴.

A study was conducted on the "Role of Perceived Parenting Practices in Adolescent Health Risk Behaviors" on 692 adolescents, and it was found that for males and females, increased negotiated unsupervised time was strongly associated with sex related protective actions and increased risk behavior (e.g., sexual activity, alcohol and marijuana use); and in males, high parental monitoring was associated with less alcohol use and consistent condom use. Perceived parental trust served as a protective factor against sexual activity, tobacco, and marijuana use in females, and alcohol use in males²⁵.

On the other hand, it was observed that peers in 58% of the cases played a good- excellent role in creating sexual health awareness of their friends due to same age, same problems and relative ease to discuss these matters. Horrocks and Benimoff described the pull of peer group due to the fact that it "offers adolescents a world in which he may socialize in a climate where the values that count are those that are set, not by adults, but by his own age group. Thus it is in the society of his peers that he finds support for his efforts at emancipation and it is there that he can find a world that enables him to assume leadership if his worth as a person is such that he can assert leadership. In addition the peer group is the major recreational outlet of the adolescent²⁰.

In this study 23% had moderate, 18% had good, while 33% had excellent awareness about proper social attitude. Attitude of 68% of adolescents regarding health and hygiene related practice was found to be proper and adequate while the remaining 32% was found to be inappropriate and improper owing to have lesser awareness in another study¹⁹.

CONCLUSION

Majority of the adolescent had moderate to good health awareness regarding adolescent health related issues. On the other hand, educational institutions and families were not playing a great role in creating awareness and/ or removing misconceptions about adolescent health related issues. Girls had better knowledge

regarding adolescent health than boys, and students of public institutions were also better than students of private sector institutions. Moreover, parents or teachers didn't find it comfortable to talk on such matters, while peers and friend's played an excellent role in more than half of the cases to create awareness regarding adolescent health related issues. Furthermore, it was recommended that families, parents and institutions should adopt more effective and efficient measures to increase awareness of adolescents regarding adolescent health related issues.

REFERENCES

1. US Department of Health and Human Services, Centers for Disease Control and Prevention. Improving the health of adolescents and young adults: A guide for states and communities. Improving the health of adolescents and young adults: a guide for states and communities 2004. HRSA.
2. Perry CL, Kelder SH, Komro KA. The Social World of Adolescents: Family, Peers, Schools. Promoting the health of adolescents: New directions for the twenty-first century. 1994: 73.
3. Currie C, Zanotti C, Morgan A, Currie D, de Looze M, Roberts C et al. Social determinants of health and well-being among young people. Health Behaviour in School-aged Children (HBSC) study: international report from the. 2009; 2010: 271.
4. Story M, Neumark-Sztainer D, French S. Individual and environmental influences on adolescent eating behaviors. *Journal of the American Dietetic Association*. 2002 Mar 31; 102(3): 40-51.
5. McNeely C, Blanchard J. The teen years explained: A guide to healthy adolescent development. Jayne Blanchard; 2010 Feb 1.
6. "Adolescence". Merriam-Webster. Retrieved May 9, 2012.
7. "Puberty and adolescence". Medline Plus. Archived from the original on April 3, 2013. Retrieved July 22, 2014.
8. Mulye TP, Park MJ, Nelson CD, Adams SH, Irwin CE, Brindis CD. Trends in adolescent and young adult health in the United States. *Journal of Adolescent Health*. 2009 Jul 31; 45(1): 8-24.
9. United Nations Children's Fund. The state of the World's Children 2011.
10. O'Connell ME, Boat T, Warner KE, editors. Preventing mental, emotional, and behavioral disorders among young people: Progress and possibilities. National Academies Press; 2009 Aug 26.
11. World Health Organization and Canada. Preventing chronic diseases: a vital investment World Health Organization.
12. Asbridge M, Azagba S, Langille DB, Rasic D. Elevated depressive symptoms and adolescent injury: examining associations by injury frequency, injury type, and gender. *BMC Public Health*. 2014 Feb 21; 14(1): 1.
13. Paperny DM. Handbook of adolescent medicine and health promotion. World Scientific; 2011.

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14. Kasedde S, Luo C, McClure C, Chandan U. Reducing HIV and AIDS in adolescents: opportunities and challenges. *Current HIV/AIDS Reports*. 2013 Jun 1; 10(2): 159-68.
15. Sathar ZA, Lloyd CB, Diers JA, Faizunnissa A. Adolescents and youth in Pakistan 2001-2002: a nationally representative survey.
16. Kwankye SO, Amedoe JA, Cash-Abbey E. Adolescent Reproductive Health. *Population Studies: Key Issues and Contemporary Trends in Ghana*. University of Ghana Readers. Sub-Saharan Publishers, Accra. 2014 Sep 1: 203-22.
17. Mc Neely C, Blanchard J. The teen years explained: A guide to healthy adolescent development. Jayne Blanchard; 2010 Feb 1.
18. Anglin T, Halper-Felsher B, Kaplan DW, Newcomer S. The science of adolescent risk-taking: Workshop report.
19. Rehman B. *General Health News*. KPK tribune.com.
20. Costello MP. Global Research Studies on Adolescent Sexuality, Reproductive Health and Fertility. *Philippine Population Review*. 2011 Dec 10; 3(1).
21. Currie C, Zanotti C, Morgan A, Currie D, de Looze M, Roberts C et al. Social determinants of health and well-being among young people. *Health Behaviour in School-aged Children (HBSC) study: international report from the*. 2009; 2010: 271.
22. Hayat life line. Mass awareness campaign on reproductive health, Dec 15, 2012, Pulse international Pakistan, pulse. Pakistan.com.
23. Sathar ZA, Lloyd CB, Haque M, Diers J, Faizunnissa A, Grant M, Sultana M. Adolescents and Youth in Pakistan 2001-2002: A Nationally Representative Survey. 2003. Islamabad: Population Council Google Scholar.
24. Roberts C, Freeman J, Samdal O, Schnohr CW, De Looze ME, Gabhainn SN et al. International HBSC Study Group. The Health Behaviour in School-aged Children (HBSC) study: methodological developments and current tensions. *International journal of public health*. 2009 Sep 1; 54(2): 140-50.
25. Borawski EA, levers-Landis CE, Lovegreen LD, Trapl ES. Parental monitoring, negotiated unsupervised time, and parental trust: The role of perceived parenting practices in adolescent health risk behaviors. *Journal of Adolescent Health*. 2003 Aug 31; 33(2): 60-70.

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AUTHOR'S CONTRIBUTION

Following authors have made substantial contributions to the manuscript as under:

- Iftikhar B:** Concept, methodology and draft.
Bashirullah N: Data collection and manuscript writing.
Ishtiaq M: Manuscript writing, proof reading.
Subhan M: Data collection.
Khan SA: Data collection and bibliography.
Khan SA: Bibliography.

Authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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